Airbus Defence and Space and CoreAVI Announce Technology Partnership to Bring to Market Safety Certifiable GPU Compute for Autonomous Systems

Aerospace TechWeek 2019, Munich, Germany, March 12, 2019: Airbus Defence and Space and Core Avionics & Industrial Inc. ("CoreAVI") announced today a technology partnership to enable the use of GPU compute in airborne systems and applications that require the highest RTCA DO-178C/EUROCAE ED-12C DAL A safety certifications. Based on the use of CoreAVI's platforms for safety certifiable applications, including its VkCore™ SC Vulkan®-based compute driver architecture, the two companies will work together to fully define and be ready to deliver software and systems that perform safety critical GPU compute operations to enable the most advanced autonomous systems and other avionics applications that can take advantage of GPU compute functions.

On Feb 26, 2019, the Khronos group announced the creation of the Vulkan Safety Critical Working Group Standards Initiative, a new committee designed to enable safety critical industries to take full advantage of the graphics and compute technology available with the Vulkan API. CoreAVI chairs the Vulkan SC Working Group and is driving forward new standards to support true GPU compute capabilities using graphics processors. Today, the company offers Vulkan-based safety critical drivers for GPU compute as well as the COTS-D line of safety critical hardware IP to enable modern avionics platforms access to a complete safety critical embedded solution.

"CoreAVI recognizes that true safety critical GPU compute is the future of mil/aero autonomous systems. Airbus agrees that this technology is the solution for those specific airborne systems with huge processing demands, especially for autonomous applications," said Damian Fozard CEO at CoreAVI. "We're excited to work with Airbus, a world class technology leader, to ensure that aerospace operators and integrators are able to harness the full capabilities and benefits of GPU compute technology in their safety certifiable platforms."

"The overall goal of this partnership is to facilitate world leading compute capabilities in the full spectrum of certified aerospace applications – from control systems to air traffic management, sensor analysis, autonomous flight systems, aerial refuelling, and more," said Francisco José Lagares Carrasco, Head of Air to Air Refueling Engineering at Airbus. "CoreAVI's platforms for safety certifiable applications and Vulkan architecture is the best platform in the market to face this ambitious challenge for building true safety critical compute applications."

For more information, please contact Sales@coreavi.com.

About Core Avionics & Industrial Inc.

Core Avionics & Industrial Inc. ("CoreAVI") is a pioneer in the military and aerospace sector with a proven track record in providing entire software and hardware IP platform solutions that enable safety critical applications. A global leader in architecting and supplying real-time and safety critical graphics, compute, and video drivers, "program ready" embedded graphics processors, and DO-254/ED-80 certifiable COTS hardware IP, CoreAVI's suite of products enables the design and implementation of complete safety critical embedded solutions that achieve the highest levels of safety certification with long-term support. CoreAVI's solutions are deployed in commercial and military avionics systems, and support rapidly emerging compute applications in the automotive, unmanned vehicle, and internet of things markets. CoreAVI's products may be purchased with certification data kits for the most stringent levels of safety certification, including RTCA DO-254/DO-178C and EUROCAE ED-80/ED-12C. www.coreavi.com